

In the Claims:

Please amend the claims as follows:

1. (original) A method for serving requests for Internet information files in an Internet caching system, comprising the steps of:

receiving, at a local Internet cache server, a user request from a user for an Internet information file;

in response to the received request, making a query for said information file, if said information file has not been cached by said local server;

in response to a reply to said query, making a file request for said information file, wherein said file request is directed to a feeder means if said reply indicates that a central file server, storing cached Internet information files, has said information file cached; and

querying, from said feeder means in response to said file request, said central file server for said information file,

in order to decrease the load on said central file server.

2. (original) The method as claimed in claim 1, wherein said query is performed by said local cache server in accordance with a protocol used for communicating between Internet cache servers.

3. (original) The method as claimed in claim 2, wherein said protocol is the Internet Cache Protocol (ICP).

4. (original) The method as claimed in claim 2, wherein said protocol is the Cache Digest.

5. (previously presented) The method as claimed in claim 1, wherein said query is directed by said local cache server to said feeder means, which feeder means as a response returns said reply.

6. (original) The method as claimed in claim 5, comprising the step of deriving, at said feeder means, a query number corresponding to said information file being concerned in said query.

7. (original) The method as claimed in claim 6, wherein said querying step comprises using the derived query number when querying said central file server for said information file.
8. (original) The method as claimed in claim 6, wherein said query provides an alphanumeric string associated with said information file, said string being used in said step of deriving said query number.
9. (original) The method as claimed in claim 8, wherein said alphanumeric string is a Uniform Resource Locator (URL) and said query number is derived from said URL and at least part of a header information field of said query.
10. (previously presented) The method as claimed in claim 1, wherein said file request provides an alphanumeric string associated with said information file, said string being used by said feeder means for deriving a query number corresponding to said information file.
11. (original) The method as claimed in claim 10, wherein said alphanumeric string is a Uniform Resource Locator (URL) and said query number is derived from said URL and at least part of a header information field of said file request.
12. (previously presented) The method as claimed in claim 1, comprising the step of creating an indexed table having an entry for each Internet information file being cached at said central file server.
13. (original) The method as claimed in claim 12, comprising the steps of:
 - performing a search in said indexed table for said information file; and
 - indicating in said reply to said query whether or not said information file was found during said search.
14. (previously presented) The method as claimed in claim 1, wherein said querying step comprises using the Structured Query Language (SQL) when querying said central file server for said information file.

15. (previously presented) The method as claimed in claim 1, wherein said querying step comprises the steps of:

selecting, based upon an original host name or IP-address of said information file, a central file server out of a set of central file servers, each server of said set being arranged to cache Internet information files with original host names or IP-addresses within a predefined range; and

querying the selected central file server for said information file.

16. (previously presented) The method as claimed in claim 6, wherein said querying step comprises the steps of:

selecting, based upon said query number derived for said information file, a central file server out of a set of central file servers, each server of said set being arranged to cache Internet information files with corresponding query numbers within a predefined range; and

querying the selected central file server for said information file.

17. (previously presented) The method as claimed in claim 1, comprising the further steps of:

retrieving, at said local cache server, said information file from its origin server if said reply to said query indicates that said information file is not cached at said central file server;

caching said information file at said local cache server; and

updating said central file server by requesting a copy of said information file from said local cache server and caching said copy in said central file server.

18. (currently amended) An arrangement in an Internet caching system, said system comprising at least one local cache server and at least one central file server, both of which servers stores cached Internet information files, which arrangement, for decreasing the load on said central file server, includes a Feeder communicating with said local cache server and with said central file server, wherein said Feeder includes:

first means for receiving a request for an Internet information file from said local cache server;

second means for deriving a SQL or data base query from an alphanumerical string received from said local cache server; and

third means for querying said central file server for said Internet information file using said query derived by said second means.

19. (original) The arrangement as claimed in claim 18, wherein said first means is arranged to operate in accordance with a layer three Internet protocol.

20. (previously presented) The arrangement as claimed in claim 18, wherein said third means is arranged to use the Structured Query Language(SQL) when querying for said Internet information file.

21. (previously presented) The arrangement as claimed in claim 18, wherein said alphanumerical string is included in said request received from said local cache server.

22. (original) The arrangement as claimed in claim 21, wherein said query is derived from said alphanumerical string and at least part of a header information field of said request received from said local cache server.

23. (original) The arrangement as claimed in claim 22, wherein said query comprises a query number, the query number being derived by applying a hash algorithm to said string and to said part of said header information field.

24. (previously presented) The arrangement as claimed in claim 18, wherein said Feeder includes:

fourth means for receiving a query for an Internet information file from said local cache server; and

fifth means for providing said local cache server with a reply to the received query.

25. (original) The arrangement as claimed in claim 24, wherein said fourth means and said fifth means are arranged to operate in accordance with a protocol used for communicating between Internet cache servers.

26. (original) The arrangement as claimed in claim 25, wherein said protocol is the Internet Cache Protocol (ICP).

27. (previously presented) The arrangement as claimed in claim 24, wherein said alphanumeric string is included in said query received from said local cache server.

28. (previously presented) The arrangement as claimed in claim 27, wherein said query derived by said second means is derived from said alphanumeric string and at least part of a header information field of said query received from said local cache server.

29. (original) The arrangement as claimed in claim 28, wherein said query comprises a query number, the query number being derived by applying a hash algorithm to said string and to said part of said header information field.

30. (previously presented) The arrangement as claimed in claim 24, wherein said Feeder includes a table with a copy of the full index of all Internet information files cached at said central file server.

31. (original) The arrangement as claimed in claim 30, wherein said reply to said received query by said fifth means is based on the content of said table.

32. (previously presented) The arrangement as claimed in claim 18, wherein said arrangement, for further decreasing the load on said central file server, includes an Updater communicating with said local cache server and with said central file server, wherein said Updater includes:

requesting means for requesting a copy of an Internet information file stored in a local cache server; and

storing means for storing the thereby received copy in a central file server.

33. (original) The arrangement as claimed in claim 32, wherein said requesting means are arranged to request a copy of an information file from its origin server, if a local cache server storing said information file resides behind a firewall.

34. (previously presented) The arrangement as claimed in claim 32, wherein said Updater is arranged to communicate with said Feeder for receiving an order to request said copy of said information file.

35. (previously presented) The arrangement as claimed in claim 32, wherein said Updater includes a list of known uncachable information files, for which files a copy should not be requested.

36. (previously presented) The arrangement as claimed in claim 16, wherein said Feeder is implemented by a lower end computer and said central file server is implemented by a higher end computer.

37. (previously presented) The arrangement as claimed in claim 32, wherein said Updater is implemented by a lower end computer and said central file server is implemented by a higher end computer.

38. (original) The arrangement as claimed in claim 37, wherein said Updater and at least one Feeder are implemented by a single lower end computer.

39. (original) An Internet caching system, comprising:

a set of local Internet cache servers, wherein each local cache server is arranged to receive requests from users for Internet information files;

at least one central file server included in a central cache site and storing cached Internet information files; and

feeder means interconnecting said set of local cache servers with said central file server, said feeder means including at least one Feeder, which Feeder comprises means for communicating with at least one local cache server in accordance with a protocol used for communicating between Internet cache servers and means for retrieving Internet information files from said central file server using data base queries, thereby decreasing the load on said central file server.

40. (original) The system as claimed in claim 39, wherein said feeder means are included in said central cache site.

41. (previously presented) The system as claimed in claim 39, wherein each of said feeder means includes a plurality of Feeders, each of said Feeder interconnecting a subset of said set of local cache servers with said central file server.

42. (previously presented) The Internet caching system as claimed in claim 39, wherein said central cache site is arranged to serve a defined set of local cache servers, which set in turn serves a linguistically and culturally homogenous user community.

43. (previously presented) The Internet caching system as claimed in claim 39, wherein said protocol used is either the Internet Cache Protocol or the Cache Digest.

44. (previously presented) The Internet caching system as claimed in claim 39, wherein each of said Feeder includes a table with a copy of the full index of all: information files cached at said central cache site.

45. (previously presented) The Internet caching system as claimed in claim 39, wherein said central file server includes cached Internet information files having original host names within a predefined range.

46. (previously presented) The Internet caching system as claimed in claim 39, further comprising updater means, interconnecting said central file server with at least one local cache server of said set, for retrieving a copy of an Internet information file from its origin server or from said at least one local cache server and for storing said copy in said central file server.

47. (canceled)

48. (previously presented) The arrangement as claimed in claim 32, wherein said Updater includes a list of known uncachable information files, for which files a copy should not be requested.